

Attorney Docket No. CARR-006

APPLICATION

FOR UNITED STATES LETTERS PATENT

SPECIFICATION

18 TO ALL WHOM IT MAY CONCERN:

19
20 BE IT KNOWN THAT I, **Michael J. Carrow**, a citizen of the United States, have
21 invented a new and useful adjustable firearm support system of which the following is a
22 specification:

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2

3 **Adjustable Firearm Support System**

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6 **CROSS REFERENCE TO RELATED APPLICATIONS**

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8 Not applicable to this application.

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12 **STATEMENT REGARDING FEDERALLY**

13 **SPONSORED RESEARCH OR DEVELOPMENT**

14

15 Not applicable to this application.

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18 **BACKGROUND OF THE INVENTION**

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22 **Field of the Invention**

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24 The present invention relates generally to firearm supports and more specifically it
25 relates to an adjustable firearm support system for adjustably and accurately supporting a
26 firearm.

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28

29 **Description of the Related Art**

30

31 Firearm supports have been in use for years for aligning scopes and sights for
32 firearms. Conventional firearm supports are typically comprised of a gun rest that is

1 stationary and non-adjustable. The user positions the front portion of the firearm (e.g.
2 rifle, pistol, etc.) upon the stationary firearm support and then must manually adjust
3 the position of the firearm by moving the firearm itself.

4

5 The main problem with conventional firearm supports is that they do not allow
6 for accurate and adjustable support of a firearm. Another problem with conventional
7 firearm supports is that they may not be portable because of their relative large size
8 and weight.

9

10 While these devices may be suitable for the particular purpose to which they
11 address, they are not as suitable for adjustably and accurately supporting a firearm.
12 Conventional firearm supports may not be adjustable nor capable of allowing fine
13 adjustment of the position of the firearm.

14

15 In these respects, the adjustable firearm support system according to the present
16 invention substantially departs from the conventional concepts and designs of the prior
17 art, and in so doing provides an apparatus primarily developed for the purpose of
18 adjustably and accurately supporting a firearm.

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2 **BRIEF SUMMARY OF THE INVENTION**
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4 In view of the foregoing disadvantages inherent in the known types of firearm
5 supports now present in the prior art, the present invention provides a new adjustable
6 firearm support system construction wherein the same can be utilized for adjustably
7 and accurately supporting a firearm.
8

9 The general purpose of the present invention, which will be described
10 subsequently in greater detail, is to provide a new adjustable firearm support system
11 that has many of the advantages of the firearm supports mentioned heretofore and
12 many novel features that result in a new adjustable firearm support system which is not
13 anticipated, rendered obvious, suggested, or even implied by any of the prior art
14 firearm supports, either alone or in any combination thereof.
15

16 To attain this, the present invention generally comprises a base and a support
17 unit pivotally attached to the base. The support unit pivots upon the base to adjustably
18 support the firearm along a horizontal plane. The support unit also allows for coarse
19 vertical adjustment of the firearm. The base includes a plurality of support members
20 adjustably attached to the base for adjusting the vertical position of the base.
21

22 There has thus been outlined, rather broadly, the more important features of the
23 invention in order that the detailed description thereof may be better understood, and
24 in order that the present contribution to the art may be better appreciated. There are
25 additional features of the invention that will be described hereinafter and that will form
26 the subject matter of the claims appended hereto.
27

28 In this respect, before explaining at least one embodiment of the invention in
29 detail, it is to be understood that the invention is not limited in its application to the

1 details of construction and to the arrangements of the components set forth in the
2 following description or illustrated in the drawings. The invention is capable of other
3 embodiments and of being practiced and carried out in various ways. Also, it is to be
4 understood that the phraseology and terminology employed herein are for the purpose
5 of the description and should not be regarded as limiting.

6

7 A primary object of the present invention is to provide an adjustable firearm
8 support system that will overcome the shortcomings of the prior art devices.

9

10 A second object is to provide an adjustable firearm support system for
11 adjustably and accurately supporting a firearm.

12

13 Another object is to provide an adjustable firearm support system that is
14 portable and lightweight.

15

16 An additional object is to provide an adjustable firearm support system that
17 may be utilized for various sizes and types of firearms including rifles and pistols.

18

19 A further object is to provide an adjustable firearm support system that allows
20 for both vertical and horizontal adjustment of the line of sight for a firearm.

21

22 Other objects and advantages of the present invention will become obvious to the
23 reader and it is intended that these objects and advantages are within the scope of the
24 present invention.

25

26 To the accomplishment of the above and related objects, this invention may be
27 embodied in the form illustrated in the accompanying drawings, attention being called
28 to the fact, however, that the drawings are illustrative only, and that changes may be

1 made in the specific construction illustrated and described within the scope of the
2 appended claims.

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2 **BRIEF DESCRIPTION OF THE DRAWINGS**

3

4 Various other objects, features and attendant advantages of the present
5 invention will become fully appreciated as the same becomes better understood when
6 considered in conjunction with the accompanying drawings, in which like reference
7 characters designate the same or similar parts throughout the several views, and
8 wherein:

9

10 FIG. 1 is an upper perspective view of the present invention.

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12 FIG. 2 is an exploded upper perspective view of the present invention.

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14 FIG. 3 is a top view of the present invention.

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16 FIG. 4 is a disassembled top view of the present invention.

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18 FIG. 5 is a top view of the base.

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20 FIG. 6 is a side view of the present invention.

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22 FIG. 7 is a front view of the present invention.

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24 FIG. 8 is a rear view of the present invention.

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26 FIG. 9 is side view of the present invention supporting a rifle in a first position.

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28 FIG. 10 is a side view of the present invention supporting a rifle in a second
29 position.

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2 DETAILED DESCRIPTION OF THE INVENTION

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4 A. Overview

5 Turning now descriptively to the drawings, in which similar reference
6 characters denote similar elements throughout the several views, FIGS. 1 through 10
7 illustrate an adjustable firearm support system **10**, which comprises a base **20** and a
8 support unit **50** pivotally attached to the base **20**. The support unit **50** pivots upon the
9 base **20** to adjustably support the firearm **14** along a horizontal plane. The support unit
10 **50** also allows for coarse vertical adjustment of the firearm **14**. The base **20** includes a
11 plurality of support members **30** adjustably attached to the base **20** for adjusting the
12 vertical position of the base **20**.

13

14 B. Base

15 The base **20** preferably has a front portion, a rear portion **24** and a handle
16 opening **26** as shown in Figures 4 and 5 of the drawings. The base **20** preferably has a
17 Y-shaped structure as further shown in Figures 4 and 5 of the drawings.

18

19 The base **20** preferably includes at least two front legs **22** extending from a
20 front portion of the base **20**. The front legs **22** each include at least one of the support
21 members **30** as shown in Figures 1 through 5 of the drawings. The front legs **22**
22 preferably extend outwardly from the base **20** at an angle as shown in Figures 4 and 5
23 of the drawings.

24

25 C. Support Members

26 A plurality of support members **30** are adjustably attached to the front portion
27 and the rear portion **24** of the base **20** as shown in Figures 1 through 5 of the drawings.
28 The support members **30** are preferably threadably connected to the base **20** in a
29 vertical manner for allowing vertical adjustment of the base **20** as best shown in

1 Figures 6 through 10 of the drawings. The support members **30** are each preferably
2 comprised of a threaded shaft that is in threaded engagement with the base **20**.
3

4 Each of the support members **30** preferably include a locking collar **32** for
5 selectively locking a desired vertical position with respect to the base **20** as best
6 illustrated in Figures 6 through 8 of the drawings. The support members **30** each
7 preferably include a pad member **34** for engaging a surface as illustrated in Figures 6
8 through 8 of the drawings. The support members **30** each also preferably include a
9 handle for allowing rotation of the legs **22**.

10

11 **D. Support Unit**

12 The support unit **50** is pivotally attached to the base **20** about a pivot axis. The
13 support unit **50** is capable of supporting a firearm **14** such as a rifle or a pistol. The
14 support unit **50** includes a pivot axle **59** that is rotatably retained within the base **20**
15 about the pivot axis as shown in Figure 4 of the drawings.

16

17 The support unit **50** preferably includes a pair of side members **52** and a support
18 portion **56** movably positioned between the side members **52** as best illustrated in
19 Figures 1 and 2 of the drawings. The support member is adjustable in a vertical
20 manner for adjusting the vertical position of the front portion of a firearm **14**. The
21 support portion **56** preferably has a cutout (e.g. V-shaped, U-shaped, etc.) for receiving
22 a firearm **14**. The side members **52** each preferably include a side slot **54** that each
23 receive a support adjuster **58** that is attached to opposing sides of the support portion
24 **56**.

25

26 **E. Pivot Adjuster**

27 The pivot adjuster **40** is attached to the base **20** and connected to a rear portion
28 **24** of the support unit **50** for pivoting the support unit **50** about the pivot axis as shown
29 in Figures 2 and 4 of the drawings. The pivot adjuster **40** preferably includes a pivot

1 pin 42 extending upwardly that is received by a support slot 51 within the support unit
2 50 as shown in Figure 4 of the drawings. The pivot adjuster 40 is preferably
3 comprised of a threaded shaft with a threaded collar threadably positioned upon the
4 threaded shaft wherein the pivot pin 42 is attached to the threaded collar.

5

6 ***F. Operation of Invention***

7 In use, the user positions the base 20 in a desired location. The user then
8 positions the firearm 14 upon the support unit 50. If an elongate firearm 14 is used
9 such as a rifle (Figures 9 and 10), a rear support 12 may be required to adequately
10 support the firearm 14. The support portion 56 is vertically adjusted to a desired
11 elevation. The user then fine tunes the vertical adjustment of the firearm 14 by
12 adjusting one or more of the support members 30. The user may also adjust the
13 support unit 50 along the horizontal plane by adjusting the pivot adjuster 40. After the
14 firearm 14 is accurately aligned with a target, the user is then able to fire the firearm
15 14 while positioned upon the support unit 50. The user is then able to adjust the scope
16 or sight accordingly and then repeat the above process.

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18 What has been described and illustrated herein is a preferred embodiment of the
19 invention along with some of its variations. The terms, descriptions and figures used
20 herein are set forth by way of illustration only and are not meant as limitations. Those
21 skilled in the art will recognize that many variations are possible within the spirit and
22 scope of the invention, which is intended to be defined by the following claims (and
23 their equivalents) in which all terms are meant in their broadest reasonable sense
24 unless otherwise indicated. Any headings utilized within the description are for
25 convenience only and have no legal or limiting effect.